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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/649,207  
Filing Date: August 27, 2003  
Appellant(s): BEACH, ROBERT

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Beach  
For Appellant

**EXAMINER'S ANSWER**

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

This is in response to the appeal brief filed 4/16/08 appealing from the Office action mailed December 5, 2007.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(8) Evidence Relied Upon**

20010010689	Awater
6628675	Neufeld
20030110484	Famolari

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Awater et al. (Us 20010010689), hereinafter referred to as Awater.

**Claim 1** Awater discloses providing said mobile unit with a data communications device (**fig 2, 100**), said device including an interface (**fig 2, 200 or fig 6, radio interfaces**) to a host processor of said mobile unit (**fig 6, CPU**), a data communications digital processor (**fig 6, 622**), including a control program (**fig 6, 622 runs firmware Para 0096**) and a radio transmitter and receiver (**fig 2, transceiver**).

Awater discloses operating said data communications device in a first WLAN mode (**Para 0055 lines 6-8, IEEE 802.11 protocol operates in a WLAN mode**) to associate with said access point and engage in data communications with said network via an access point (**PARA 0004, 802.11 standard focuses on AP based networks**)

using said radio transmitter and receiver (**fig 2, 200 and Para 0057, element 200 transmits and receives packets**) .

Awater discloses operating said data communications device in a second personal area communications mode (**Para 0055, lines 8-10, Bluetooth is a second mode**), wherein said data communications device communicates with at least one peripheral device (**Para 0008, line 12, peripheral interface**) using said radio transmitter and receiver (**fig 2, 200 and Para 0057, element 200 transmits and receives packets**).

**Claim 5** Awater discloses wherein said control program is arranged to operate said data communications device in said first and second modes (**Para 0053, the interoperability device allows the device to switch between an 802.11 and Bluetooth mode**).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-4, 6, 8, 9, 14-18, 21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al. (Us 20010010689)

**Claim 2** Awater discloses wherein said data communications device operating in said first WLAN mode uses a first communications protocol and said data

communications device operating in said second personal area communications mode communicated with said at least one peripheral device using a second protocol (**see fig 1, using an IEEE 802.11 protocol for communication and a Bluetooth protocol for another form of communication**).

Awater does not specifically disclose the second protocol being a modification of the first protocol.

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the second protocol being used within Awater's invention, Bluetooth, is comparable and may be made equivalent to a modification of the 802.11 protocol, as both protocols aim for wireless communication with a destination device, so thus have the same goal but modified ways of implementing their goals.

**Claim 3, 6** Awater discloses communication with a peripheral device as disclosed in the rejection of claim 1. Furthermore, the communication device depicted in fig 2, element 100, is equivalent to a master device, as it switches its communication modes, allowing Bluetooth communication with the peripheral device, and allowing the communication in a hold state, park state, idle state and connected state.

Awater does not specifically disclose permanently associating with at least one peripheral device.

However, it would have been obvious to one of the ordinary skill in the art at the time of the invention that the use of Bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity.

Furthermore, it would have been obvious to one of the ordinary skill in the art at the time of the invention pertaining to claim 6, that re-association occurs when the two device come back into proximity of one another.

**Claim 4, 16, 17** Awater does not specifically disclose said data communications device in said second mode including operating said radio transmitter at a selected power level lower than a power level used for operating in said first data communication mode.

Awater discloses switching (selecting) from a 802.11 mode to a Bluetooth mode as disclosed within the rejection of claim 1, where it would have been obvious to one of the ordinary skill in the art that Bluetooth is a standard and communication protocol primarily designed for low power consumption. Therefore the second communication mode (Bluetooth), when selected for communication would be dedicated for operating at a lower power.

**Claim 8** Awater discloses at least one access point connected to at least one computer for providing wireless data communications between said at least one computer and at least one mobile unit (**Para 0007, 802.11 MAC, such as that shown in fig 2 is connected to an AP and communication takes place between STA and AP**), said access point using a first data communication protocol to receive association requests from mobile units and to form one or more associations with mobile units for data communications therewith (**Para 0007, 802.11 communication protocol is being utilized for communication between STA and AP**).

Awatere discloses at least one mobile unit including a host processor (**fig 6, CPU**) and a first data communications device (**fig 2, 100**), said first data communications device including a first data communications digital processor (**fig 6, 622**) having a first control program (**fig 6, 622 runs firmware Para 0096**) and a first radio for sending and receiving data (**fig 2, transceiver**).

Awatere discloses at least one peripheral device (**Para 0008, line 12, peripheral interface**).

Awatere discloses wherein said first control program is arranged to send association requests to access points using said first radio and to provide data communications to and from said computer via at least one access point connected thereto (**Para 0007, probe request frames allow STA to scan for AP**).

Awatere discloses wherein said first control program communicates directly with said at least one peripheral device (**Para 0008, Bluetooth technology allows a station to connect to a peripheral device and interface; connects one device to another with one universal short range link, directly**).

Awatere does not specifically disclose the peripheral device including a second data communications device, said second data communications device including a second data communications digital processor having a second control program and a second radio.

However, it would have been obvious to one of the ordinary skill in the art at the time of the invention that in order for a peripheral device to communicate with the communication device as disclosed in fig 2, 100, it must have a processor, software and



a transceiver of some sort for operation. Furthermore, the configuration of fig 2 may be that of a peripheral device such as the PDA disclosed in Para 0053.

**Claim 9** Awater discloses wherein said access point acts as a master device and permanently associated with said at least one peripheral device (**Para 0007, beacon messages sent by AP to STA, where the beacon messages would indicate some form of master control from the AP; furthermore, the AP is well known in the art to act as a master device**).

**Claim 14** Awater discloses said second control program including a network communication program (**fig 2 may represent a peripheral device with 102 representing the program**) to cause said at least one peripheral device to become associated with an access point (**Para 0003, where the 802.11 function of the device will communicate with an AP**) connected to a network including said at least one computer (**fig 6, CPU**) and to engage in data communications using said first communications protocol (**fig 6, IEEE 802.11 protocol**).

**Claim 15** Awater discloses said first control program being arranged to cause said first data communications device to communicate directly to said peripheral device when said first communications device is in direct communication with said second communication device and to communicate with said second communication device via said network when said first communications device is no in direct communication with said second communication device (**Para 0054, where a sniffer is provided for determining if a device operating using Bluetooth is available –in direct**

**communication—or if a device is functioning in IEEE 802.11 –not in direct communication–).**

**Claim 21** Awater discloses a peripheral device (**fig 2 may represent a peripheral device with 102 representing the program**) including a data communications device (**fig 2, 100**), said data communications device including a data communications digital processor (**fig 6, 622**) having a control program (**fig 6, 622 runs firmware Para 0096**) and a radio (**fig 2, transceiver**),

Awater does not specifically disclose wherein said control program is arranged to cause said data communications device to permanently associate with a data communications device on a mobile unit and conduct communications therewith.

However, it would have been obvious to one of the ordinary skill in the art at the time of the invention that the use of Bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity.

**Claim 25** Awater discloses operating said data communications device in a first WLAN mode (**Para 0055 lines 6-8**) to associate with said access point and engage in data communications with said network via an access point (**PARA 0004, 802.11 standard focuses on AP based networks**).

3. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al. (Us 20010010689) in view of Neufeld (US 6628675)

**Claim 7** Awater discloses said communication device including a power saving operational mode (Para 0059, switching off transmitter equivalent to power savings)

wherein said device is inactive for selected periods of time (inactive periods of time are when the transmitter is switched off)

Awater does not specifically disclose wherein said control program includes instructions to cause said data communications device to synchronize said selected periods of time with said peripheral device.

Neufeld discloses wherein said control program includes instructions to cause said data communications device to synchronize said selected periods of time with said peripheral device **(fig 4 depicts, after an inactive period of time has been experienced, synchronization takes place in a remote unit using a delayed finger).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the communication device as disclosed by Awater may be modified so as to perform synchronization after a period of inactivity has occurred. The motivation for this modification is for the obvious sync of these two communicating devices.

4. Claims 10-13, 19, 20, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al. (Us 20010010689) in view of Famolari (US 20030110484).

**Claim 10** Awater does not specifically disclose said first control program including an initiating program whereby said first data communication device receives initiation requests from said second data communications device and forming a permanent association therewith.

Famolari discloses an initiating program whereby said first data communication device receives initiation requests from said second data communications device (**see**

**abstract and see fig 2b, several inquiries and requests being communicated between between two devices).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the requests for communication as disclosed by Famolari within the functions of Bluetooth control device. The motivation for this combination is to ensure that both devices are capable of communicating using updated software and ensuring compatibility and proximity.

**Claim 11, 19, 22** Awater discloses reassociating two devices, wherein a device may go from a park or idle mode to an active mode (see rejection of claim 6).

Awater does not specifically disclose the first communication device receiving reassociation requests from said peripheral device permanently associated therewith, and whereby the first communication device thereafter engages in data communications with said at least one peripheral device.

Famolari discloses the first communication device receiving reassociation requests from said peripheral device permanently associated therewith, and whereby the first communication device thereafter engages in data communications with said at least one peripheral device **(see abstract and see fig 2b, several inquiries and requests being communicated between between two devices).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the requests for communication as disclosed by Famolari within the functions of Bluetooth control device. The motivation for this

combination is to ensure that both devices are capable of communicating using updated software and ensuring compatibility and proximity.

**Claim 12, 13, 20, 23** The combined teachings of Awater and Famolari disclose a reassociation program using requests as disclosed in the rejection of claim 11 and 22. Furthermore, it would have been obvious to one of the ordinary skill in the art at the time of the invention that on power up of any device performing communication with another device, that some form of reassociation is necessary on power up, where the use of Bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity and furthermore, reassociation when they come within a proximity for a second time.

**Claim 18** Awater discloses a mobile unit including a host processor (**fig 6, CPU**) and a data communications device, said data communications device (**fig 2, 100**) including a data communications digital processor (**fig 6, 622**) having a control program (**fig 6, 622 runs firmware Para 0096**) and a radio for sending and receiving data (**fig 2, transceiver**), wherein said control program is arranged to send association requests to access points according to a first data communications protocol using said radio and to provide data communications to and from a computer via at least one access point connected thereto (**Para 0007, 802.11 communication protocol is being utilized for communication between STA and AP; requests**),

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the second protocol being used within Awater's invention, Bluetooth, is comparable and may be made equivalent to **a modification** of the 802.11 protocol, as

both protocols aim for wireless communication with a destination device, so thus have the same goal but modified ways of implementing their goals.

However, Awater does not specifically disclose wherein said control program includes an initiating program whereby said data communication device receives initiation requests from a peripheral device and forms a permanent association therewith using this modified protocol.

Famolari discloses wherein said control program includes an initiating program whereby said data communication device receives initiation requests from a peripheral device and forms a permanent association therewith using this modified protocol **(see abstract and see fig 2b, several inquiries and requests being communicated between between two devices).**

Furthermore it would have been obvious to one of the ordinary skill in the art at the time of the invention that the use of Bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity.

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the requests for communication as disclosed by Famolari within the functions of Bluetooth control device. The motivation for this combination is to ensure that both devices are capable of communicating using updated software and ensuring compatibility and proximity.

**Claim 24** Awater discloses said control program is arranged to send said reassociation requests in response to a beam signal from said mobile unit after it fails to receive data communications signals from said mobile unit **(Para 0009, where**

**Bluetooth uses the function of acknowledgements, wherein ACK and NACK are known in the art to be applied as a request and response procedure; furthermore Para 0054 discloses a sniffer for detection, where an appropriate form of sniffing would involve determining a failure to receive data or polling).**

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

**(10) Response to Argument**

(I) The appellant argued that the cited art does not disclose the applicants claimed, "using said radio transmitter and receiver". The examiner points to fig 2 (see elements 100 and 200), which discloses a combined IEEE 802.11/bluetooth transceiver, where a transceiver by definition is a device that has both a transmitter and a receiver which are combined. Furthermore, Awater uses this transceiver in order to communicate with other devices (hence a transceiver is used for transmission and reception of data to/from devices).

The appellant further argues that 2 transceivers are present within Awater, however the examiner points to fig 2, where element 100 is a single transceiver which combines the functionality of IEEE 802.11 and Bluetooth communication. The appellant also argues that no mention of a single transceiver being used for both types of communication is present according to the arguments on page 7 of the appeal, however

the examiner notes that claim one does not specifically disclose that a single transceiver is used (see claim 1).

(II) Arguments pertaining to claims 2-4 and 6 rely on the arguments which are addressed within (I) above, therefore the response to arguments in (I) are relied upon to address these claims.

Pertaining to claim 8, the appellant argued that the cited art does not disclose wherein first control program communicates directly with said at least one peripheral device. The examiner maintains that the claimed limitation interpreted within its broadest sense is disclosed within the rejection of claim 8, wherein Awater discloses a chip which consists of firmware (disclosed within fig 6, where all of the components make up a control program) containing several components, including element 622 firmware/program. This firmware communicates with other devices such as the peripheral device (see Para. 0008, peripheral interface).

Pertaining to claim 21, the appellant argues that the cited art does not disclose causing said data communication device to permanently associate with a data communication device. The examiner maintains that according to paragraph 0053, application software allows synchronization between the device and a PDA, where it would have been obvious to one of the ordinary skill in the art at the time of the invention that syncing a PDA to a device is equivalent to making a permanent association.



The examiner notes that the claimed limitation (permanent association) is vague, as the claim does not define what an association is, so it is therefore open to broad interpretation. The examiner also notes that when the 2 devices are turned off, a permanent association no longer exists. Thus without defining what a permanent association is, the examiner is entitled to a broad interpretation.

(III) Similar arguments are presented with respect to claim 7, pertaining to the use of said transmitter and receiver such as that shown in (I) above. The examiner maintains the stance taken in (I) above is maintained, with respect to claim 7

(IV) Similar arguments are presented with respect to claims 10-13, 18-20 and 22-24, pertaining to the control program communicating directly with a peripheral device and a permanent association. The examiner maintains the stance taken in (II) above is maintained with respect to claim 7.

The appellant argued that the cited art does not disclose using a modification of said first data communication protocol. According to the appellant on page 12 of the arguments, the 2 protocols both relate to a wireless communication device. Furthermore, both communication protocols require modulation schemes.

Art Unit: 2616

Clearly, since the claimed subject matter does not show how one protocol is modified from another, these protocols (802.11 and Bluetooth), are modifications of one another, as they share the same characteristics of modulation schemes and means for communication.

Conferees:

/Christopher P Grey/

Examiner, Art Unit 2616

/Seema S. Rao/

Supervisory Patent Examiner, Art Unit 2616

/Aung S. Moe/

Supervisory Patent Examiner, Art Unit 2616